

03CO

Attorney's Docket: UCT-0003-00

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Applicant(s): Bahram Javidi and Osamu Motaba

Serial No.: 09/993,894

Filed: November 23, 2001

For: Method For Secure Ultrafast Communication

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Assistant Commissioner for Patents, Washington, DC 20231, on April 3, 2002  
(Date of Deposit)

Competitive Technologies, Inc.  
Name of applicant, assignee, or registered rep.

Conna J. May 4/3/2002  
Signature Date

**INFORMATION DISCLOSURE STATEMENT**

Assistant Commissioner for Patents  
Washington, DC 20231

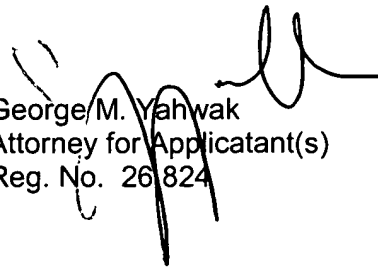
Sir:

Applicant submits herewith a Form PTO/SB/08B and a copy of each document listed thereon.

To the best of Applicant's knowledge, this Information Disclosure Statement is being filed before the first Office Action on the merits in the present application, so no fee is due under Rule 97.

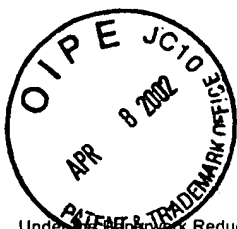
The listed documents are brought to the Examiner's attention because cited in the specification of the instant application or are known to Applicant and/or Applicant's attorney, and may be considered by the Examiner to be material to the examination of this application. This submission should not be construed as a representation that a search has been made or that no better art exists. No inference should be made that the documents constitute prior art or are in fact material merely because they are referenced in this submission.

Respectfully submitted,



George M. Yahwak  
Attorney for Applicant(s)  
Reg. No. 26824

Competitive Technologies, Inc.  
1960 Bronson Road  
Fairfield, CT 06430  
(203) 255-6044  
Fax: (203) 254-1102  
April 3, 2002



Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

PTO/SB/08B (10-01)  
Approved for use through 10/31/2002. OMB 0651-0031  
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE



<b>Substitute for form 1449B/PTO</b> <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b> <i>(use as many sheets as necessary)</i> Sheet <u>1</u> of <u>2</u>		<b>Complete if Known</b>	
		Application Number	09/993,894
		Filing Date	November 23, 2001
		First Named Inventor	Bahram Javidi
		Group Art Unit	
		Examiner Name	
		Attorney Docket Number	UCT-0003-00

OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS			
Examiner Initials	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T <sup>2</sup>
		H.-Y., Li, Y. Qiao, and D. Psaltis, "Optical neural network for real-time face recognition," Appl. Opt. 32, 5026-5035 (1993)	
		C. L. Wilson, C. I. Wilson and E.G. Peak, "Combined optical neural network fingerprint matching," in Optical Pattern Recognition VIII, D.P. Casasent and T. Chao, eds. Proc. SPIE 3073, 373-382 (1997)	
		B. Javidi and J. L. Horner, "Optical pattern recognition for validation and security verification," Opt. Eng. 33, 1752-1756 (1994)	
		P. Réfrégier and B. Javidi, "Optical image encryption based on input plane and Fourier plane random encoding," Opt. Lett. 20, 767-769 (1995).	
		H. F. Heanue, M.C. Bashaw, and L. Hesselink, "Encrypted holographic data Storage Based on Orthogonal-phase-code multiplexing," Appl. Opt. 34, 6012-6015 (1995).	
		F. Goudail, F. Bollaro, B. Javidi, and P. Réfrégier, "Influence of a perturbation in a double phase-encoding system," J. Opt. Soc. Am. A 15, 2629-2638 (1998)	
		N. Yoshikawa, M. Itoh, and T. Yatagai, "Binary computer-generated holograms for Security Applications from a Synthetic Double-exposure method by electron-beam lithography," Opt. Lett. 23, 1483-1485 (1998)	
		O. Matoba and B. Javidi, "Encrypted optical memory system using three-dimensional keys in the Fresnel comain," Opt. Lett. 24, 762-764 (1999)	
		G. Unnikrishnan, J. Joseph, and K. Singh, "Optical encryption system that uses phase conjugation in a photorefractive crystal," Appl. Opt. 37, 8181-8186 (1998)	
		Y.T. Mazurenko, "Holography of wave packets," Appl. Phys. B 50, 101-114 (1990)	

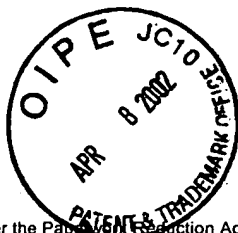
Examiner Signature		Date Considered	
--------------------	--	-----------------	--

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.





Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

PTO/SB/08B (10-01)

Approved for use through 10/31/2002. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

<b>Substitute for form 1449B/PTO</b> <b>INFORMATION DISCLOSURE</b> <b>STATEMENT BY APPLICANT</b>  (use as many sheets as necessary) Sheet 2 of 2		<b>Complete if Known</b>	
		Application Number	09/993,894
		Filing Date	November 23, 2001
		First Named Inventor	Bahram Javidi
		Group Art Unit	
		Examiner Name	
		Attorney Docket Number	UCT-0003-00

OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
		A.M. Weiner, D.E. Leaired, D.H. Reitze, and E.G. Peak, "Femtosecond Spectral Holograph," IEEE J. Quantum Electron. 28, 2251-2261 (1992)	
		A.W. Weiner, J.P. Heritage, and J.A. Salehi, "Encoding and Decoding of Femtosecond Pulses," Opt. Lett. 13, 300-302 (1988).	
		M.C. Nuss, M. Li, T.H. Chiu, A.M. Weiner, and A. Partori, "Time-to-Space mapping of femtosecond pulses," Opt. Lett. 19, 664-666 (1994)	
		P.C. Sun, Y.T. Mazurenko, W.S.C. Chang, P.K.L. Yu, and Y. Fainman, "All-optical Parallel-to-Serial Conversion by holographic spatical-to-temporal frequency-encoding," Opt. Lett. 20, 1728-1730 (1995).	
		D.M. Marom, P-C. Sun, and Y. Fainman, "Analysis of spatial-temporal converters for all-optical communication links," Appl. Opt. 37, 2858-2868 (1998).	
		D.M. Marom, D. Panasencko, P-C. Sun, and Y. Fainman, "Spatical-temporal wave mixing for space-time conversion," Opt. Lett. 24, 563-565 (1999)	
		T. Konishi and Y. Ichioka, "Ultrafast image transmission by optical time-to-two-dimensional-space-to-time-two-dimensional-space conversion," J. Opt. Soc. Am. A 16, 1076-1088 (1999)	

Examiner Signature	Date Considered
--------------------	-----------------

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.